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## 28. SOME INFRASPECIFIC TAXA OF THE PANICUM COLORATUM L. COMPLEX

Panicum coloratum L. is a complex taxon comprising several distinct forms having chromosome numbers $2 n=18,36,32$ and 54 (Joshi, Patil \& Manchanda 1959 ; Patil, Vohra \& Joshi 1961), which are poorly understood taxonomically and phylogenetically. The author (Jauhar 1963) studied 8 tetraploid ( $2 n=36$ ) and two hexaploid $(2 n=54)$ forms of this grass in considerable detail from the standpoints of morphology (both vegetative and floral), foliar epidermal patterns, chromosome behaviour during meiosis and pollen characters with a view to utilize this information for assessing precisely their taxonomic status and understanding evolutionary trends in them. From these studies it was convincingly shown that $P$. coloratum constitutes a heterogeneous assemblage, the range of variation present in it transgressing specific limits. In view of this, the 10 types of $P$. coloratum were classified into six distinct groups which are remarkably uniform within themselves and strikingly different from one another. The hexaploid group was elevated to a specific rank and named as Panicum nehruense Jauhar et Joshi (Jauhar \& Joshi 1966).

From among the tetraploid types one was named as Panicum simpliciflorum Jauhar et Joshi (Jauhar \& Joshi 1965) primarily on the basis of its typically simple, raceme-type panicle because it lacks some of the key characters of Panicum coloratum (see Jauhar 1967). The remaining four groups with $12 n=36$ chromosomes have been retained under $P$. coloratum and given infraspecific ranks; they have been designated as varieties.

Some salient diagnostic features of the four varieties are described below :

## P. coloratum var. subglabrum Jauhar var. nov.

Gramen perenne, moderate altum, caespitosum, erectum, tetraploideum ( $2 n=4 x=36$ ), rarius superne ramosum. Culmi $104-120 \mathrm{~cm}$. alti, 5-8-nodi ; nodi et partes inferiores internodorum paulum pilosi et debiliter tincti pigmento brunneo, Folia et foliorum vaginae sparse

